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EXAMINER	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/796,282	JUNG ET AL.	
	Examiner	Art Unit	
	Hung Q. Dang	2621	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *23 October 2007*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-24* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☐ Claim(s) *1-24* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *10 March 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *See Continuation Sheet*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

Continuation of Attachment(s) 3). Information Disclosure Statement(s) (PTO/SB/08), Paper No(s)/Mail Date :05/14/2004, 09/30/2004, 07/11/2006, 12/29/2006, 02/05/2007, 08/2 4/2007.

DETAILED ACTION

Response to Arguments

Applicant's arguments filed 10/23/2007 have been fully considered but they are not persuasive.

At pages 7-8, regarding claim 1, Applicant argues that Kim does not disclose the limitation of "a reader which reads the selected ENAV application corresponding to the player language information, based on language information of the ENAV application recorded on a startup file of an information storage medium read by the reproducing apparatus."

In response, the Examiner respectfully disagrees. In [0062], Kim recites, "...if the DVD is inserted into the reproducing apparatus, the presentation engine of the reproducing apparatus retrieves the language information contained in the file VIDEO_TS.IFO and determines whether a language designated as the first default value of the reproducing apparatus exists in the language information in operation. If the language information contained in the file VIDEO_TS.IFO of the DVD ..." Obviously the VIDEO_TS.IFO is a "startup file recorded on an information storage medium read by the reproducing apparatus" when the storage medium is initially inserted into the reproducing apparatus. This file contains the language information of the ENAV application recorded on the storage medium as illustrated in Fig. 2. The reproducing apparatus first reads this file during startup, i.e., when the storage medium is inserted, to determine whether the language designated in the reproducing apparatus (player language information) is supported in the storage medium as illustrated in Fig. 7, step

701. Based on the determination, which using the information in the startup file VIDEO_TS.IFO, if the storage medium (a DVD in Kim) supports the language, the apparatus reads the ENAV application prepared in the language as illustrated in step 703 of Fig. 7 and further described in [0064]. Obviously, Kim discloses "a reader which reads the selected ENAV application corresponding to the player language information, based on language information of the ENAV application recorded on a startup file of an information storage medium read by the reproducing apparatus."

For that reason, claim 1 stays rejected as previously presented.

Dependent claims 2, 3, 5, 6, and 9-13 are also rejected because they depend on an rejected independent claim and include additional features which are also suggested or taught by Kim as described in details below.

Claim 14 and their dependent claims are also rejected for the same reason as discussed in independent claim 1 above.

Dependent claims 16-20 are also rejected because they depend on an rejected independent claim and include additional features which are also suggested or taught by Kim as described in details below.

At page 8, regarding claims 4, 7-8, and 21-23, Applicant argues, "Kim does not disclose language information being recorded in a startup file to be first read when the interactive mode is selected." In response, the Examiner respectfully disagrees. For example, as illustrated in Fig. 7, the interactive mode is selected following either one of two branches step 705 and also described in [0059]. Before this, the startup file has been first read as illustrated in step 701 as described in the discussion of claim 1 above.

For that reason, Kim also discloses the limitation of "the language information recorded in a startup file to be first read when the interactive mode is selected." Therefore, claims 4, 7-8, and 21-23 are rejected as previously presented.

At page 10, regarding claim 15, Applicant argues that Yamane fails to disclose "buffering AV data to ensure seamless reproduction"

In response, the Examiner respectfully disagrees. In column 38, lines 32-58, Yamane discloses, "Because of the time required to move the reading head between data blocks, it is not possible to assure seamless reproduction between data DbA and DbC, and between DbC and DbD, unless the distance traveled between these data blocks requires less time than the time required for a data underflow state to occur in the stream buffer". In other words, for seamless reproduction, enough data should be buffered so that the distance between two blocks of data that need to be reproduced continuously must be traveled by the head in less time than it takes to consume all the data in the buffer. Clearly, Yamane discloses "buffering AV data to ensure seamless reproduction" to be combined with Kim.

At page 11, Applicant argues that Kim does not disclose, "the ENAV data is selected automatically based on the SPRM."

In response, the Examiner respectfully disagrees. As understood, SPRM stands for "system parameter table". As shown in Fig. 7, step 701 involves checking if the language designated in the reproducing apparatus is supported by the DVD. If the answer is "yes" the ENAV application for that language is automatically selected as shown in step 703 using the language mapping table shown in Fig. 5. However, the

language mapping table is a system parameter table because its entries represent various modes that the system is to run on. For that reason, Kim obviously discloses "the ENAV data is selected automatically based on the SPRM" and claim 24 stands rejected as previously presented.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

Claims 1-3, 5-6, 9-14, and 16-20 are rejected under 35 U.S.C. 102(a) as being anticipated by Kim et al. (US 2003/0012558).

Regarding claim 1, Kim et al. disclose a reproducing apparatus comprising: an audio visual (AV) reproducing engine which decodes AV data ([0011]; [0012]; [0026]; [0042]); and an enhanced audio visual (ENAV) engine ([0043]), which includes player language information ("received language information" in [0024]; [0027]; [0044]) selecting one among a plurality of ENAV applications ("application programs" in [0043]), each of which includes substantially similar contents and is made with a different language from the other ENAV applications ([0017]; [0047]), and interprets and executes the selected ENAV application with reference to the player language information in order to reproduce the AV data in an interactive mode ([0021]; [0022]; [0027]; [0064]); and a reader which reads the selected ENAV application corresponding to the player language information, based on language information of the ENAV

application recorded on a startup file of an information storage medium read by the reproducing apparatus ([0062]; [0064]; Fig. 7; also see "Response to Arguments" above)

Regarding claim 2, Kim et al. also disclose the player language information is stored as a system parameter (SPRM) ([0044]).

Regarding claim 3, Kim et al. also disclose wherein the ENAV engine selects the one ENAV application with reference to the player language information ([0021]; [0022]; [0027]; [0064]) and the language information indicating a language of contents contained in the ENAV applications ([0025]; [0064]), the language information recorded in the startup file to be first read when the interactive mode is selected (Fig. 5; [0059]).

Regarding claim 5, Kim et al. also disclose the information storage medium stores the language information (Fig. 5; [0059]) and the plurality of ENAV applications ([0050]; [0064]; Fig. 2), each of which includes the substantially similar contents and is made with the different language from the other ENAV applications ([0017]; [0047]), and the ENAV engine compares the language information with the player language information and selects one among the plurality of ENAV applications ([0021]; [0024]; [0025]).

Regarding claim 6, Kim et al. also disclose the ENAV engine compares the language information with the player language information ([0021]; [0024]; [0025]) stored in a system parameter table stored in the reproducing apparatus (Fig. 5).

Regarding claim 9, Kim et al. also disclose the language information comprises elements that each link a loading information file included in corresponding one of the

ENAV applications ("Language – Directory Information" table in Fig. 5), and the ENAV engine parses the language information ([0021]; [0024]; [0025]).

Regarding claim 10, Kim et al. also disclose the element comprises an condition element storing a selection criterion to select one among the ENAV applications based on the ENAV engine parsing the language information ("Language – Directory Information" table in Fig. 5 with the selection criterion is a match of the player language information and a language code itself in [0021], [0024], and [0025]).

Regarding claim 11, the language information comprises a "name property and "value" property in a condition element that stores a condition selecting a linked loading information file included in the element linking the loading information file ("name" property being the "character code", and "value" property being either "KR", "JP", or "EN-US" in Fig. 5; the condition is a match of the player language information and a language code itself in [0021], [0024], and [0025]; linked loading information file is the selected value, which is either "\DVD_ENAV\KOR\A.HTM", "\DVD_ENAV\JPN\A.HTM", or "\DVD_ENAV\ENG\A.HTM" in "Language – Directory Information" table in Fig. 5).

Regarding claim 12, Kim et al. also disclose the language information is recorded using a "name" property and a "value" property in the element linking the loading information file ("name" property being the "character code", and "value" property being either "KR", "JP", or "EN-US" in "Language – Directory Information" table of Fig. 5).

Regarding claim 13, Kim et al. also disclose the ENAV engine parses language information recorded in a language code with two characters according to an ISO 639

standard ([0021]; [0024]; [0025]; "Character Code" in "Language – Directory Information" table in Fig. 5; [0056]).

Regarding claim 14, Kim et al. disclose an enhanced audio visual reproducing apparatus, comprising: a reader which reads audio visual (AV) and interactive data from an optical disk ([0026]; [0045]; [0064]); a memory including a system parameter table (SPRM) which stores DVD video system parameters including player language information ([0062]; Fig. 5); an AV reproducer which reproduces the AV data read from the optical disk ([0011]; [0012]; [0026]; [0042]); and an enhanced audio visual (ENAV) engine which selects an ENAV application corresponding to the player language information, based on language information of the ENAV application recorded on a startup file of the optical disk ([0021]; [0022]; [0027]; [0062]; [0064]; Fig. 2; also see "Response to Arguments" above).

Regarding claim 16, Kim et al. also disclose the AV reproducer and the ENAV engine interface through an Application Program Interface (API) ([0043]).

Regarding claim 17, Kim et al. also disclose when the optical disk is reproduced in the interactive mode the ENAV engine reads a startup file from the optical disk and selects corresponding interactive data from the optical disk based on the startup file ([0058]; [0062]; [0063]; [0064]).

Regarding claim 18, Kim et al. also disclose the ENAV engine parses language information from the startup file ([0058] ; [0062]) and compares the parsed language information with the player language information ([0021]; [0022]; [0024]; [0025]) thereby

selecting a corresponding loading file indicating interactive data files to be buffered ([0027]; [0045]; [0064]).

Regarding claim 19, Kim et al. also disclose the interactive data comprises a plurality of enhanced audio-visual (ENAV) data in a plurality of languages, respectively ([0047]; [0050]).

Regarding claim 20, Kim et al. also disclose the ENAV data is selected automatically based on the SPRM ([0020]; [0021]; [0022]; [0024]; [0026]; [0062]; [0064]; also see "Response to Arguments" above)

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 4, 7-8, and 21-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kim et al. (US 2003/0012558) as applied to claims 1-3, 5-6, 9-14, and 16-20 above, and further in view of Lamkin et al. (US Patent 7,178,106).

Regarding claim 4, see the teachings of Kim et al. as discussed in claim 1 above. Kim et al. further disclose wherein the ENAV engine selects the ENAV application with reference to a system parameter ([0021]; [0022]; [0027]; [0064]) and the language information indicating a language of contents contained in the ENAV applications ([0021]; [0024]; [0025]), the language information recorded in the startup file to be first read when the interactive mode is selected (Fig. 2; [0059]; also see "Response to

Arguments" above). Kim et al. also disclose the reproducing apparatus to work according to a DVD-Video standard ([0049]).

However, Kim et al. do not disclose the system parameter SPRM 0 set according to a DVD-Video standard.

Lamkin et al. disclose the system parameter SPRM 0 set according to a DVD-Video standard (column 55, entry 0: "Menu Description Language Code (M_LCD or AMGM_LCD)" of first table).

One of ordinary skill in the art at the time the invention was made would have been motivated to incorporate the system parameter SPRM 0 set according to a DVD-Video standard as disclosed by Lamkin et al. to be the layer language information in the reproducing apparatus disclosed by Kim et al. to make the apparatus compatible with DVD-Video standard, which is the existing standard.

Regarding claim 7, see the teachings of Kim et al. as discussed in claim 5 above. Further, Kim et al. also disclose the ENAV engine compares the language information with a system parameter ([0021]; [0024]; [0025]). However, Kim et al. do not disclose a system parameter SPRM 0 set according to a DVD-Video standard in the reproducing apparatus.

Lamkin et al. disclose Lamkin et al. disclose the system parameter SPRM 0 set according to a DVD-Video standard (column 55, entry 0: "Menu Description Language Code (M_LCD or AMGM_LCD)" of first table).

One of ordinary skill in the art at the time the invention was made would have been motivated to incorporate the system parameter SPRM 0 set according to a DVD-

Video standard as disclosed by Lamkin et al. to be the layer language information in the reproducing apparatus disclosed by Kim et al. to make the apparatus compatible with DVD-Video standard, which is the existing standard.

Regarding claim 8, see the teachings of Kim et al. as discussed in claim 5 above. Further, Kim et al. also disclose the ENAV engine parses language information recorded using a "name" property ad a "value" property ("name" property being the "character code", and "value" property being either "KR", "JP", or "EN-US" in Fig. 5) in an element that stores a condition selecting a linked loading information file ("Language – Directory Information" table in Fig. 5), included in an element that links a loading information file included in a corresponding one of the ENAV applications ("Language – Directory Information" table in Fig. 5), and compares the language information with a system parameter in the reproducing apparatus ([0021]; [0024]; [0025]).

However, Kim et al. do not disclose the system parameter SPRM 0 set according to a DVD-Video standard.

Lamkin et al. disclose the system parameter SPRM 0 set according to a DVD-Video standard (column 55, entry 0: "Menu Description Language Code (M_LCD or AMGM_LCD)" of first table).

One of ordinary skill in the art at the time the invention was made would have been motivated to incorporate the system parameter SPRM 0 set according to a DVD-Video standard as disclosed by Lamkin et al. to be the layer language information in the reproducing apparatus disclosed by Kim et al. to make the apparatus compatible with DVD-Video standard, which is the existing standard.

Regarding claim 21, see the teachings of Kim et al. as discussed in claim 20 above. However, Kim et al. do not disclose an SPRM 0 table entry.

Lamkin et al. disclose the SPRM 0 table entry set according to a DVD-Video standard (column 55, entry 0: "Menu Description Language Code (M_LCD or AMGM_LCD)" of first table).

One of ordinary skill in the art at the time the invention was made would have been motivated to incorporate the SPRM 0 table entry set according to a DVD-Video standard as disclosed by Lamkin et al. to be the layer language information in the reproducing apparatus disclosed by Kim et al. to make the apparatus compatible with DVD-Video standard, which is the existing standard.

Regarding claim 22, see the teachings of Kim et al. as discussed in claim 20 above. However, Kim et al. do not disclose an SPRM 16 table entry.

Lamkin et al. disclose the SPRM 0 table entry set according to a DVD-Video standard (column 55, entry 16: "Initial Language Code (INI_LCD) for AST" of first table).

One of ordinary skill in the art at the time the invention was made would have been motivated to incorporate the SPRM 16 table entry set according to a DVD-Video standard as disclosed by Lamkin et al. to be the layer language information in the reproducing apparatus disclosed by Kim et al. to make the apparatus compatible with DVD-Video standard, which is the existing standard.

Regarding claim 23, see the teachings of Kim et al. as discussed in claim 20 above. However, Kim et al. do not disclose an SPRM 18 table entry.

Lamkin et al. disclose the SPRM 18 table entry set according to a DVD-Video standard (column 55, entry 18: "INI_LCD for SPST" of first table).

One of ordinary skill in the art at the time the invention was made would have been motivated to incorporate the SPRM 18 table entry set according to a DVD-Video standard as disclosed by Lamkin et al. to be the layer language information in the reproducing apparatus disclosed by Kim et al. to make the apparatus compatible with DVD-Video standard, which is the existing standard.

Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kim et al. (US 2003/0012558) as applied to claims 1-3, 5-6, 9-14, and 16-20 above, and further in view of Yamane et al. (US Patent 5,784,528).

Regarding claim 15, see the teachings of Kim et al. as discussed in claim 14 above. Further, Kim et al. also disclose the ENAV engine buffers the selected interactive data corresponding to the AV data ([0045]). However, Kim et al. do not disclose to ensure seamless reproduction.

Yamane et al. disclose buffering AV data to endure seamless reproduction (column 38, lines 52-58; also see "Response to Arguments" above).

One of ordinary skill in the art at the time the invention was made would have been motivated to incorporate ensuring of seamless reproduction disclosed by Yamane et al. into the reproducing apparatus disclosed by Kim et al. to provide smooth reproduction. Without the incorporated feature, the apparatus would give discomforting feeling to viewers' eyes.

Claim 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kim et al. (US 2003/0012558) as applied to claims 1-3, 5-6, 9-14, and 16-20 above, and further in view of Horiguchi et al. (US Patent 6,370,322) and Winter et al. (US 2004/0076405).

Regarding claim 24, see the teachings of Kim et al. as discussed in claim 20 above. However, Kim et al. do not disclose an SPRM 21 table entry.

Horiguchi et al. disclose the SPRM 21 table entry set according to a DVD-Video standard (column 9, lines 10-12, Fig. 14).

One of ordinary skill in the art at the time the invention was made would have been motivated to incorporate the SPRM 21 table entry set according to a DVD-Video standard as disclosed by Horiguchi et al. into the reproducing apparatus disclosed by Kim et al. to make the apparatus compatible with DVD-Video standard, which is the existing standard.

However, the proposed combination of Kim et al. and Horiguchi et al. does not disclose the SPRM 21 table entry to store a language code based upon which the ENAV data is selected (Kim et al, [0020]; [0021]; [0022]; [0024]; [0026]; [0062]; [0064]). Instead, the entry is reserved (Horiguchi et al., Fig. 14; column 9, lines 10-12).

Winter et al. disclose using a reserved area to store a language code ([0070]).

One of ordinary skill in the art at the time the invention was made would have been motivated to incorporate the storing a language code in the reserved area disclosed by Winter et al. into the apparatus disclosed by Kim et al. and Horiguchi et al. to store a language code in a reserved area like SPRM 21 table entry to expand the

capability of the apparatus. The incorporated feature would enhance the user interface because it provides the users with more options for ENAV data selection.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hung Q. Dang whose telephone number is 571-270-1116. The examiner can normally be reached on M-Th:7:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thai Tran can be reached on 571-272-7382. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Hung Dang.